A report is presented of the experience in New York City under the law passed by the State Legislature April 10, 1970. The data cover the first years during which the law was effective (July 1, 1970-June 30-1971). Declines were noted in births, especially out-of-wedlock, in neonatal mortality, and in deaths associated with pregnancy, particularly those linked with abortions. The authors conclude the law had a favorable effect on maternal and child health.

# Legal Abortion 1970-1971—The New York City Experience

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#### Introduction

On April 10, 1970 the New York State Legislature passed a law which vastly liberalized the performance of abortions in New York State. Heretofore, the law permitted abortion only if, in the physician's judgment, the life of the expectant mother was in jeopardy. The new law made the abortional act legal if the woman consented and if the abortion was performed by a licensed physician within 24 weeks of the commencement of pregnancy. The law was silent on the question of residency requirement. Its effective date was July 1, 1970.

The short interval between the passage of the new law and its effective date was a time of conjecture and surmise.

Opponents of abortion reform, as might be expected, prophesied serious difficulties. But others, many favorably disposed towards a liberalized abortion policy, began to ask serious questions. What would the demand be? Estimates varied widely from 50,000 to as high as onequarter of a million. What about the influx of non-residents and would they overwhelm the medical facilities of our city and deprive residents of services? Some predicted flatly that New York City would become the "abortion capital of the nation." Would minority groups be served? Would they even come forward to request service or would abortion be repugnant to them and viewed as a form of genocide? Would readily available abortion replace contraception as the main mode of family planning? Would women come for abortion early in pregnancy? Could the medical facilities of New York City "tool up" quickly enough to meet the demand? Would legal abortion be done safely—with a minimum of risks? And what about the beneficial effects of safe abortion? Proponents of legal abortion had urged it on grounds that it would reduce maternal morbidity and mortality. Would this really occur, or would criminal, unclean abortions persist unchecked with deaths from the clean. legal procedures merely superimposed on the mortalities of the criminal ones. Would there be any impact on the birth rate and on infant mortality.

The following is a report of the experience in New York City under the new abortion law for the first year based on statistical data collected.

#### **Method of Collecting Statistical Data**

Data were collected by means of certificates designed for reporting all terminations of pregnancy, induced or spontaneous. The filing of these certificates is mandated by the New York City Health Code. These provide data regarding number of abortions, weeks of gestation, reason for the termination, age and parity of the female, and whether a previous termination had occurred since July 1, 1970. The mode of termination and the facility where termination took place, are recorded; also the legal residence of the patient.

However, the certificates which are supposed to be filed within 48 hours after termination were not designed to yield information on complications. A separate weekly reporting system was therefore instituted under which a special report form was to be forwarded every week to the Department of Health by each facility performing abortions. This form enabled the department to obtain data on the number and type of complications.

In addition, the municipal hospitals provided a daily telephone report on abortions performed.

Each method of reporting served as a check on the other and helped us estimate the degree of underreporting known to exist.

The certificates of termination of pregnancy provided our primary source of information. Most of the analyses which follow are based on them.

#### **Residents and Non-Residents Receiving Abortions**

	Number Reported
Residents	50,919
Non-residents	88,123
Total:	139,042

In the first 12 months after abortions were made legal in New York State, certificates for 139,042 abortions

were filed with the New York City Health Department. Of these 50,919 were residents, 88,123 were non-residents. Taking into account other sources of supplementary information; e.g.; telephone reports from municipal hospitals and weekly abortion reports from participating hospitals, it is estimated (probably conservatively) that 168,000 abortions were done the first year and that about 60% were to non-residents.

#### Ten Leading Areas for Abortions to Non-Residents

Women came to New York City for abortions from every one of the 50 states.

Table 1 lists the 10 most frequent areas from which the non-residents came. New Jersey geographically adjacent to New York heads the list. It is noteworthy that New York State women also used New York City facilities.

# **Trends for Residents and Non-residents**

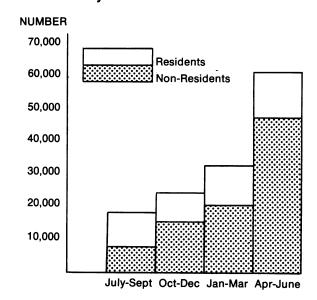
As the year progressed, based on quarterly reports, non-residents of New York City accounted for an increasing proportion of reported abortions. (See Figure 1)

In the first 3 months the ratio of residents to non-residents was close to 1 (actually 5:4). In the last 3 months of this 12-month period this ratio had changed to approxi-

Table 1—Ten Leading Areas for Abortions to Non-Residents

State or area	Number	Per cent of total non-resident abortions
New Jersey	11849	13.4
Ohio	7403	8.4
Michigan	7296	8.3
Illinois	7163	8.1
Pennsylvania	6600	7.5
Florida	5255	6.0
Massachusetts	5107	5.8
New York State (excl. N.Y.C.)	4428	5.0
Connecticut	3729	4.2
Canada & other countries	2788	3.2
Total:	61618	69.9

Figure 1—Number of Induced Abortions Reported by Quarters of the Year to Residents and Non-Residents of New York City



mately 1:2; i.e., 2 non-resident abortions to each abortion reported for residents.

# Facilities for Abortions in New York City: Types of Provider

For the residents of New York City the chief source of abortions were the municipal hospitals and the voluntary hospitals which together provided about 80% of abortions for residents of the city. For the non-residents the chief source of abortions was the proprietary hospitals—some of which were the New York City termini of active abortion referral services for out-of-towners. Non-residents also were largely served by free standing facilities—some affiliated with hospitals. Abortions were not fully reported by these free-standing facilities, and it may well have been that they provided the main source for non-residents.

It was the stated policy of the municipal hospitals to accept only city residents. However, almost 1000 non-residents were treated at these hospitals. (Table 2).

# Trends in Utilization of Facilities by Type of Provider

The first and last 6-month periods of the year indicate a striking increase in the number of abortions per-

Table 2—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Type of Provider, July 1, 1970—June 30, 1971

	Nun	nbers	Per cents		
Provider	Residents	Non-residents	Residents	Non-residents	
-Municipal	18.152	942	35.6	1.1	
Voluntary-service	8,178	1,414	16.1	1.6	
Voluntary-private	13,700	11,561	26.9	13.1	
Proprietary	7,535	39,177	14.8	44.5	
Free-standing clinics	3,354	35,029	6.6	39.7	
Total	50,919	88,123	100.0	100.0	

formed as well as a changing trend in utilization of type of facility. Most striking is the emergence of the free standing clinics (out-of-hospital facilities) as a major provider; especially for the out-of-towners. In part this represents better reporting to the Health Department with the passage of time, but mostly it reflects the mushrooming of out-of-hospital facilities. (Table 3) The City's municipal hospitals accounted for a proportionately greater share of abortion to city residents with the passage of time as did free standing clinics. On the other hand, voluntary and proprietary hospitals exhibited a proportionate decline for the residents.

#### Abortions Performed by Weeks of Gestation: Residents and Non-Residents

Despite many predictions that the demand would overwhelm the facilities and result in waiting lists, delays and eventually in later and more difficult abortions, the year's data show otherwise. Early abortion—that is before 13 weeks—was the rule. Non-residents showed a higher proportion of early terminations, but even for the residents,

almost three-quarters had abortions performed before 13 weeks gestation. (Table 4)

#### **Trends in Abortions Performed by Period of Gestation**

With the passage of time, which saw concerted efforts by the New York City Health Department and voluntary agencies to encourage early abortion, a favorable trend developed. A greater proportion of women received early abortions in the last half of the year as compared with the first. (Table 5) It can be postulated that when the new law took effect, women who wanted abortions were in all stages of pregnancy and that there may have been an accumulation of pregnancies 13 weeks or over awaiting termination; this could account for some of this trend towards earlier procedures, but not all.

#### **Method of Termination of Pregnancy by Facility**

The municipal hospitals had the highest proportion of saline inductions (29 + %) which was understandable

Table 3—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Type of Provider July 1, 1970-December 31, 1970

	Num	bers	Percents		
Provider	Residents	Non-residents	Residents	Non-residents	
Municipal	6,138	359	31.7	1.5	
Voluntary-service	3,381	612	17.5	2.5	
Voluntary-private	6,523	5,982	33.7	24.3	
Proprietary	3,184	14.771	16.5	60.0	
Free-standing clinic	123	2,886	0.6	11.7	
Total	19,349	24,610	100.0	100.0	

January 1, 1971—June 30, 1971

	Nun	nbers	Per cents		
Provider	Resident	Non-residents	Residents	Non-residents	
Municipal	12,014	583	38.1	0.9	
Voluntary-service	4,797	802	15.2	1.3	
Voluntary-private	7,177	5,579	22.7	8.8	
Proprietary	4,351	24,406	13.8	38.4	
Free-standing clinic	3,231	32,143	10.2	50.6	
Total	31,570	63,513	100.0	100.0	

Table 4—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Weeks of Gestation; July 1,1970—June 30, 1971

Weeks of	Nun	nbers	Per cents		
Gestation	Residents	Non-Residents	Residents	Non-Residents	
12 Weeks or less	37,094	68,924	72.8	78.2	
13 Weeks or more	13,124	18,762	25.8	21.3	
Not stated	701	437	1.4	0.5	
Total	50,919	88,123	100.0	100.0	

since this group had highest proportion of patients in later stages of gestation. The reverse was true of the proprietary hospitals and free-standing facilities. The latter should not be performing terminations after 12 weeks' gestations, since these are set up as ambulatory facilities.

The fact that the municipal hospitals saw a greater proportion of patients at a later stage of pregnancy (city residents) accounts for their greater use of saline induction.

The proprietary hospitals and out-of-hospital facilities relied heavily on D & C and suction. (Tables 6A and 6B).

# **Trends in Method of Termination Employed**

In comparing the first and last half of the year, some trends became apparent. First, the method employing suction gained in favor over the established traditional method

Table 5—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Weeks of Gestation, July 1, 1970-June 30, 1970

Weeks of	Nun	nbers	Per cents		
gestation	Residents	Non-residents	Residents	Non-residents	
12 Weeks or less	13,464	18,043	69.6	73.3	
13 Weeks or more	. 5,885	6,567	30.4	26.7	
Not stated	0	0			
Total	19,349	24,610	100.0	100.0	

January 1, 1971-June 30, 1971

Weeks of	Nun	nbers	Per cents		
gestation	Residents	Non-residents	Residents	Non-residents	
12 Weeks or less	23,630	50,881	74.8	80.1	
13 Weeks or more	7,239	12,195	22.9	19.2	
Not stated	701	437	2.3	0.7	
Total	31,570	63,513	100.0	100.0	

Table 6A—Number of Induced Abortions in New York City by Method of Termination and Provider; July 1, 1970-June 30, 1971

			Method of	Termination	
Provider	Total	D & C	Suction	Saline	Hysterotomy
Municipal	19,094	5,556	7,525	5.654	359
Voluntary	34,853	11,098	16,267	6,863	629
Proprietary	46,712	20,699	17,949	7,870	194
Free-standing	38,383	2,527	35,764	87	5
Total	139,042	39,880	77,505	20,474	1,183

Table 6B—Per cent of Induced Abortions in New York City by Method of Termination and Provider; July 1, 1970-June 30, 1971

			Method of	Termination	
Provider	Total	D&C	Suction	Saline	Hysterotomy
Municipal	100.0	29.1	39.4	29.6	1.9
Voluntary	100.0	31.8	46.7	19.7	1.8
Proprietary	100.0	44.3	38.4	16.9	0.4
Free standing	100.0	6.6	93.2	0.2	0.0*
Total	100.0	28.7	55.7	14.7	0.9
*Less than 0.05					5.5

of D & C. Physicians reported less bleeding and tewer complications with suction and as they gained experience, tended to use suction more frequently. The proportionate decline in termination by saline instillation reflected the trend toward earlier stages of pregnancy at time of abortion. The marked reduction in use of hysterotomy is accounted for by the same trend and the disappearance of the backlog of women in an advanced stage of pregnancy which existed in the initial weeks of the new law. (Table 7) Greater familiarity with the method of saline terminations may also have influenced the decline in the use of hysterotomy.

# Age Distribution of Women With Induced Abortions

The overwhelming majority of women residents and non-residents undergoing abortions were 18 years or over. For the most part, the non-residents were a younger group with 10% less than 18 years old. Even among the city residents 6.0% were 17 years or younger. (Table 8) The youngest individual to have an abortion reported was a 10 year old New York City resident who had already delivered one live born child. Among the residents slightly more than 10% were in the group 35 and over; among non-residents this older age group was somewhat less (8.7%).

### Trends in Age Distribution of Women Receiving Abortions

No striking trend was noted with the passage of time in terms of the age distribution of residents or non-residents undergoing abortions, except a slight decrease in the proportion of women 17 or less for the non-residents and those 35 and over for both groups. (Table 9).

#### **Race and Ethnic Group of Women Undergoing Abortions**

One of the great concerns was that deprived groups, essentially black and Puerto Rican women might not find services available or that they would not seek legitimate abortion services despite the liberalized law. These were the women who had suffered most under the previous restrictive law with the tragic consequences of unskilled attempted abortions resulting all too often in sepsis and death as our records had indicated through bygone years.

Among city residents who received abortion services, 42.8% were non-white and 10.2% were Puerto Rican. (Table 10) For this same period of time and by way of comparison, 31% of all live births were non-white and 18% Puerto Rican. Among non-residents who had abortions performed, 90% were white, 9.5% were non-white and only 0.5% were Puerto Rican. The much higher proportion of white non-residents reflects in part the financial problems for non-residents since they would need funds for travel as well as the wherewithal for the costs of abortion. This would tend to eliminate the deprived minorities lacking finances.

In comparing the data for the 1st and 2nd halves of this 12-month period, it appears that the proportion of nonwhite and Puerto Rican women of all residents who received services had increased.

A slight but perceptible increase was also noted among non-residents in the number of minority groups seeking abortions. (Table 11A, 11B).

#### Parity of Women Undergoing Abortions in New York City Residents and Non-Residents

Among the residents of the city undergoing abor-

Table 7—Number and Per cent of Induced Abortions in New York City by Method of Termination; July-December 1970 and January-June 1971

Method of	First 6	Months	Last 6	Months		
termination	July-Dec. Number	1970 Per cent	JanJune Number	1971 Per cent	Total for Number	r the year Per cent
D&C	17,239	39.2	22,641	23.8	39,880	28.7
Suction	18,427	41.9	59,078	62.1	77,505	55.7
Saline	7,584	17.3	12,890	13.6	20,474	14.7
Hysterotomy	709	1.6	474	0.5	1,183	0.9
Total	43,959	100.0	95,083	100.0	139,042	100.0

Table 8—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Age of Woman July 1, 1970-June 30, 1971

Age of woman	Nun	nbers	Per cents		
	Residents	Non-residents	Residents	Non-residents	
17 or less	3,049	9,088	6.0	10.3	
18-19	5,300	16,527	10.4	18.8	
20-34	37,121	54,442	72.9	61.8	
35 or over	5,191	7,654	10.2	8.7	
Not stated	258	412	0.5	0.4	
Total	50,919	88,123	100.0	100.0	

Table 9—Number and Per cent of Induced Abortion in New York City to Residents and Non-Residents by Age of Woman; July 1, 1970-December 31, 1970

	Num	nbers	Per cents		
Age of woman	Residents	Non-residents	Residents	Non-residents	
17 or less	1,156	2,791	6.0	11.3	
18-19	1,957	3,734	10.1	15.2	
20-34	14,063	15,504	72.7	63.0	
35 and over	2,066	2,417	10.7	9.8	
Not stated	107	164	0.5	0.7	
Total	19,349	24,610	100.0	100.0	

January 1, 1971-June 30, 1971

	Nun	nbers	Per cents		
Age of woman	Residents	Non-residents	Residents	Non-residents	
17 or less	1,893	6,297	6.0	9.9	
18-19	3,343	12,793	10.6	20.1	
20-34	23,058	38,938	73.0	61.4	
35 and over	3,125	5,237	9.9	8.2	
Not stated	151	248	0.5	0.4	
Total	31,570	63,513	100.0	100.0	

Table 10-Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Race and Ethnic Group; July 1, 1970-June 30, 1971

Race and ethnic group	Num	nbers	Per cents		
	Residents	Non-residents	Residents	Non-residents	
White	23,927	79,309	47.0	90.0	
Non-white	21,770	8,352	42.8	9.5	
Puerto Rican	5,222	462	10.2	0.5	
Total	50,919	88,123	100.0	100.0	

Table 11A—Trends in Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Race and Ethnic Group; First Six Months—Last Six Months July 1, 1970-**December 31, 1970** 

Race or	Nun	nbers	Per cents		
ethnic group	Residents	Non-residents	Residents	Non-residents	
White	9,644	22,265	49.8	90.5	
Non-white	7,909	2,199	40.9	8.9	
Puerto Rican	1,796	146	9.3	0.6	
Total	19,349	24,610	100.0	100.0	

Table 11B—January 1, 1971-June 30, 1971

Race or ethnic group	Num	bers	Per cents		
	Residents	Non-residents	Residents	Non-residents	
White	14,283	57.044	45.2	89.8	
Non-white	13,861	6,153	43.9	9.7	
Puerto Rican	3,426	316	10.9	0.5	
Total	31,570	63,513	100.0	100.0	

tions, more than half (55.5%) had had one or more previous pregnancies. In fact, over 12% of residents had experienced 4 or more previous pregnancies. For less than half (42.9%) this was a first pregnancy. On the other hand, among non-residents the reverse was true—about ½ had one or more previous pregnancies but for almost ½ this was a first pregnancy. (Table 12).

#### Trends in Per Cent of Induced Abortions by Order of Pregnancy Residents and Non-Residents

The data of the second half of the year indicated an increased proportion of women with previous pregnancies. This observation holds for both residents and non-residents although more apparent for the residents. (Table 13A, Table 13B).

# Complications Reported Following Abortion (Source: Weekly Report)

The overall rate of complications based on the

Weekly Abortion Reports was 8.5 per 1000 abortions. This is undoubtedly too low and represents underreporting particularly for the early ambulatory procedures since reports of follow-up of all these patients are not available. What emerges very clearly is that later abortions (13 weeks and over) were less safe than early abortions and were attended by more than five times the risk of complication—since the rate for the former was 26.8 per 1000 abortions compared with 4.6 for the early terminations.

The most commonly reported complication for the early termination was perforation of the uterus (1.5/1000) followed by infection and hemorrhage in that order.

Whereas in the late terminations the most common complication is retained tissue (10.1/1000) followed by infection and hemorrhage. (Table 14).

#### **Complications Following Abortion by Method of Termination**

The suction method appeared to be associated with the lowest complication rate. (Table 15) In the course of the

Table 12—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Order of Pregnancy; July 1, 1970-June 30, 1971

Pregnancy	Num	nbers	Per	Per cents		
order	Residents	Non-residents	Residents	Non-residents		
1st	21,848	57,317	42.9	65.0		
2nd to 4th	21,976	24,217	43.1	27.4		
5th or More	6,309	6,105	12.4	7.0		
Not stated	786	484	1.6	0.6		
Total	50,919	88,123	100.0	100.0		

Table 13A—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Order of Pregnancy July 1, 1970-December 31, 1970

Pregnancy	Num	nbers	Per	Per cents		
order	Residents	Non-residents	Residents	Non-residents		
1st	8,868	16,682	45.8	67.8		
2nd to 4th	7,783	6,141	40.1	25.0		
5th or more	2,393	1,630	12.4	6.7		
Not stated	305	157	1.7	0.5		
Total	19,349	24,610	100.0	100.0		

Table 13B—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Order of Pregnancy January 1, 1971-June 30, 1971

Pregnancy order	Num	nbers	Per cents		
	Residents	Non-residents	Residents	Non-residents	
1st	12,980	40,635	41.1	64.0	
2nd to 4th	14,193	18,076	45.0	28.5	
5th or more	3,916	4,475	12.4	7.0	
Not stated	481	327	1.5	0.5	
Total	31,570	63,513	100.0	100.0	

year this method gained in popularity over method of dilatation and currettage.

Perforation of the uterus was recorded as the most frequent complication whether suction or D & C were used. Complications of hemorrhage and infection appeared to occur more frequently with D & C than with suction.

The complication rate for the method of termination employing saline instillation was more than six times greater than the complication rate following suction or D & C.

Hysterotomy, the method of termination with the highest complication rate, is associated with pre-operative complications and a variety of adverse conditions. Accordingly, the complication rates for this procedure must be interpreted with this in mind.

#### **Reasons for Termination of Pregnancy**

Prior to the liberalization of the law the reason cited on the certificate for termination was predominantly psychiatric.

It is interesting to note that since July 1, 1970, the overwhelming reason cited was "sociologic". The psychiatric and medical reasons have become relatively rare. (Table 16)

# **Trends in Deaths Associated With Pregnancy**

Prior to the change in the law, many supporters of abortion reform believed that maternal mortality would be decreased with the advent of legal, safe abortion services.

Table 14—Complications Following Abortion, By Type and Period of Gestation, Numbers and Rates per 1,000 Abortions New York City, July 1, 1970-June 30, 1971

Type of	Total		12 weeks and under		13 weeks and over	
complication	Number	Rate	Number	Rate	Number	Rate
Hemorrhage	192	1.5	84	0.8	108	4.7
Infection	248	1.9	102	0.9	146	6.3
Perforated uterus	192	1.5	168	1.5	24	1.0
Anesthesia	12	0.1	7	0.1	5	0.2
Shock	9	0.1	2	*	7	0.3
Retained tissue	289	2.2	56	0.5	233	10.1
Failure	67	0.5	5	*	3/41/4	1/4.7/8
Lacerated cervix	31	0.2	24	0.2	7	0.3
Other	66	0.5	42	0.4	24	1.0
Unspecified	11	0.1	7	0.1	4	0.2
Total						
complications	1,117	8.5	497	4.6	620	26.8
Total abortions	131,956		108,817		23,139	

Table 15—Complication Rates per 1,000 Abortions by Type and Method of Termination, New York City July 1, 1970-June 30, 1971

<b>-</b>	•	Method of Termination					
Type of Complication	Total	Dilatation and curettage	Suction	Saline	Hysterotomy	Other	(including) (hysterectomy)
Hemorrhage	1.5	1.3	0.8	5.0	4.9	1.2	
Infection	1.9	1.1	0.8	7.6	13.7	2.3	
Perforated uterus	1.5	1.8	1.6	0.1	6.9	0.6	
Anesthesia	0.1	0.1	0.1	0.2	1.0	_	
Shock	0.1	0.1	*	0.3	1.0		
Retained tissue	2.2	0.6	0.5	13.4	2.0	0.6	
Failure	0.5	•	0.1	3.6	_	_	
Lacerated cervix	0.2	0.3	0.2	0.1	1.0	0.6	
Other	0.5	0.4	0.4	1.0	3.9	1.2	
Unspecified	0.1	0.2	•	0.2	_	0.6	
Total	8.5	5.9	4.4	31.6	34.3	7.0	
SOURCE: Weekly Abortion *Less than 0.05.	Reports.						

Table 16—Number and Per cent of Induced Abortions in New York City to Residents and Non-Residents by Reason for Termination July 1, 1970—June 30, 1971

Reason for	Num	nbers	Per cents		
termination	Residents	Non-residents	Residents	Non-residents	
Medical	680	344	1.3	0.4	
Psychiatric	211	143	0.4	0.2	
Sociologic	31,453	67,611	61.8	76.7	
Other	3,881	6,443	7.6	7.3	
Not stated	14,694	13,582	28.9	15.4	
Total	50,919	88,123	100.0	100.0	

Our data thus far seem to bear out the validity of this claim. In 1971 New York City experienced its lowest maternal mortality rate on record, 2.9 per 10,000 live births. This represents a decrease of 37% since 1970. (Table 17).

#### Trends in Live Births and Birth Rates

In 1947 New York City experienced the largest number of live births on record 171,174 in a given year. In the years that followed, the births continued at a high level, averaging about 165,000 until 1964 when a downward trend was noted for the subsequent four years. In 1968 approximately 142,000 births were reported. This downward trend then reversed itself and by 1970 births were over 149,000.

It had been predicted by demographers that births would increase steadily in the 1970s because of the increased number of women in the childbearing ages stemming from the "baby boom" in the late 1940s.

Table 17—Pregnancy Associated Deaths, Total and Due to Abortions New York City 1960-1971

Number of Deaths Rates per 10,000 Live Births						
Year	Due to Abortions		Abortions Abortions			
1960	115	46	6.9	2.8		
1961	130	55	7.7	3.3		
1962	121	53	7.3	3.2		
1963	116	42	6.9	2.5		
1964	74	34	4.5	2.1		
1965	104	41	6.6	2.6		
1966	80	31	5.2	2.0		
1967	76	20	5.2	1.4		
1968	66	21	4.7	1.5		
1969	77	24	5.3	1.6		
1970	68	22	4.6	1.5		
JanJune						
*1970	37	12	5.1	1.7		
July-Dec.						
1970	31	10	4.0	1.3		
1971 (Pro-						
visional)	38	12	2.9	0.9		
*Before libera	lization of ti	ne abortion law.				

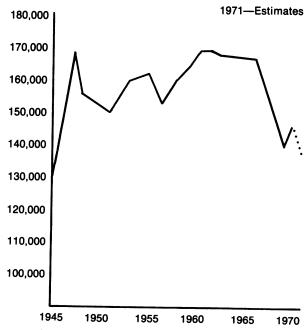
Thus the decline in births observed for 1971 is noteworthy. Instead of the anticipated rise the number declined to 131,920, a decrease of almost 12%. It is reasonable to conjecture that family planning services and particularly the abortion program have exerted an impact on the number of live births. It is recognized that other factors are operating as well—namely the war in Vietnam, economic recession and attitudes related to postponing childbearing. (Figure 2)

#### **Trends in Out-of-Wedlock Births**

Despite the decline in total live births in New York City during the period 1963-1968, out-of-wedlock births did not share in this decline but on the contrary continued to increase in number. By 1970 these births had risen to 31,929 constituting 21.4% of total births.

It was only in 1971 that this constant upward trend was reversed and for the first time an actual decline was

Figure 2—Number of Live Births in New York City 1945-1971

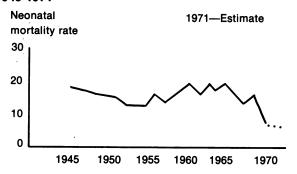


The 1971 birth rate of 16.7/1000 population is lowest rate since 1945.

Table 18—Total Live Births, Out-of-Wedlock Births and In-Wedlock Births New York City, 1963-1971

Year	Total live births	Total out-of-wedlock births	Total in-wedlock births
1963	167,848	18,436	149,412
1964	165,695	20,223	145,472
1965	158,815	20,980	137,835
1966	153,334	22,714	130,620
1967	145,802	24,336	121,466
1968	141,920	26,262	115,658
1969	146,221	29,325	116,896
1970	149,192	31,929	117,263
1971	131,920	28,036	103,884
(Provisi	onal)		,

Figure 3—Neonatal Mortality Rates in New York City 1945-1971



recorded. In fact the decline in number of out-of-wedlock births, 12.2% was greater than the decline for in-wedlock births. (Table 18)

#### **Trends in Infant Mortality**

One of the concerns in liberalizing the abortion law was to enable women to have only "wanted" babies. It was felt that planned pregnancies starting with family planning and furthered by safe abortions would result in a more favorable outcome and a diminution in infant mortality. Thus far, the data would support the premise.

The neonatal mortality rate in 1971 declined to 14.9/1000 live births which achieved a record low in New York City. (Figure 3) The decline was shared by white and non-white.

# Summary

The experience during the first year following the enactment of a liberalized abortion law in New York City has been reviewed.

The large number of abortions was estimated conservatively at 168,000 for the first year and of this number 60% were to non-residents of the city who came from every state particularly those adjacent to New York as well as the Midwest. Even women from other countries such as Canada came to New York City for abortions.

The chief sources for abortions were the municipal and voluntary hospitals for the residents. In contrast the chief sources for abortions for non-residents were the proprietary hospitals and free-standing clinics with the latter increasing rapidly in proportion to the other sources of care.

The majority of women were aborted in the first trimester with a greater proportion among non-residents (78.2%) than among residents (72.8%). As time elapsed, the trend for earlier abortions was noticeable.

Among all methods of termination utilized the suction method was the one most frequently employed. Dilatation and curettage was second. The municipal hospitals had the highest percentage of saline terminations.

The majority of women receiving abortion were not teen-agers. Non-residents on the average were a younger group than the residents. In fact 10% of them were 17 years or less.

Every ethnic group was represented among women who sought abortions. In fact among the residents, more than half were the minority groups (53%). Among the non-residents only 10% were non-white and Puerto Rican.

Residents of New York City seeking abortions were more likely to have had prior pregnancies (55.5%) as compared with non-residents (34.4%).

As for reported complications associated with abortions, the late terminations carried a much higher risk—more than five times greater than the early ones. 26.8/1000 versus 4.6/1000. Likewise, the methods utilized for late terminations carried much greater risks than the methods utilized for early terminations. 31.6/1000 for saline, as compared with 4.4/1000 for suction.

All deaths associated with pregnancy showed a dramatic decline in 1971 achieving a record low—2.9/10,000 live births, a decline of 37% over the previous year. The decline was apparent for both abortion-associated and non-abortion associated deaths, particularly the latter.

The total number of live births declined noticeably in 1971 despite predictions to the contrary based on the baby boom of the 40's. Even the out-of-wedlock births shared in this trend with a decline in their number reversing the consistently upward trend over the years.

The neonatal (the first 27 days of life) mortality declined in 1971 and reached a new low for New York City, namely 14.9/1000 live births.

#### **Conclusion**

Judging by the decline in pregnancy associated deaths, especially those associated with abortions, the decline in births, especially the out-of-wedlock, and the decline in neonatal mortality, one could conclude that the liberalized abortion law has had a favorable impact on maternal and child health.

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